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ABSTRACT

This module on sterlization and sanitation is the second of ten (CE 028 308-318) in the barbering/cosmetology course of a bilingual skills training program. (A Vocabulary Development Workbook for modules 6-10 is available as CE 028 313.) The course is designed to furnish theoretical and laboratory experience. Module objectives are for students to develop trade-related Spanish/English vocabulary, to list natural defenses of the human body against pathogenic bacteria, to name three main types of vaccines and how they are made, to define sterlization and sanitation, and to list physical and chemical agents of sterlization and sanitation. Contents include list of module objectives: pretest: four sections on (1) natural defenses against bacteria, (2) medical defenses against bacteria, (3) physical agents of sterilization and sanitation, and (4) chemical agents of sterilization and sanitation; posttest: and English/Spanish vocabulary list. Each section is organized into this format: instructions, vocabulary, and concepts (statements or questions to direct reading) presented in English and Spanish: readings: and worksheets to evaluate comprehension to the trade-related reading material. (Readings in modules 1-5 are in both English and Spanish.) Worsheets also cover these areas: vocabulary, definitions, word attack skills, writing skills, spelling, and application of terminology to the trade area. (YLB)

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ED199498

BILINGUAL SKILLS TRAINING PROGRAM

BARBERING/COSMETOLOGY

MODULE 2.0

S T E R I L I Z A T I O N
A N D
S A N I T A T I O N

CE 028 309

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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I. PURPOSE

This module is to:

1. Assist students in developing trade-related vocabulary.

2. Facilitate the learning of the trade through reading information sheets, vocabulary lists and language exercises.

3. Provide student with individual check lists for individual progress.

II. INRODUCTION

Cosmetology and Barbering require the student to follow a defined theoretical course of study as well as acquire practical knowledge in the respective trade. Due to the limited amount of time allowed for theory and the difficulty of the technical vocabulary found in the reading, the student often needs additional help in this area. Students in above trades are required to pass the State Board Examination before practicing their trade. To succeed in passing this exam and to be better equipped for the job, the student must be able to function in the oral and written communication skills and utilize the technical vocabulary of their trade. This module is structured to provide for individual needs of the students so that they may progress at their pace in the academic or theoretical area. A simple coding system is utilized to facilitate the student use.

III. ACTIVITIES

Because each module is geared for individualized instruction it is important to assess the individual needs of the students. A pre-test is administered to students before they begin working with a module. Instructions are given orally in Spanish and English.

Instructions, vocabulary and concepts in each module are written in Spanish and English so as to explain the purpose of each reading. There is a reading for each objective presented in the module. The reading is referred to as an information sheet. This sheet is designed to provide the student with reading material incorporating the technical vocabulary that is needed in the trade skill area. The gradation of reading is from simple to more complex. Thus the information sheet facilitates the learning process in the theoretical course of study. Each information sheet is followed by a series of diversified work sheets directly checking for comprehension of the reading material. Other items covered in these work sheets are: vocabulary, definitions, word attack skills, writing skills, spelling and application of terminology to the trade area.

Oral language development exercises directed by the instructor constantly reinforce the concepts presented. Students have an opportunity to utilize and develop the technical vocabulary needed in their trade by interaction among themselves, the instructor and tutors. The Bilingual dimension is specifically directed at concept and vocabulary development.

The students are directed to utilize supplementary materials available through the Learning Resource Center to reinforce each area as they progress in the module. Audio visuals are utilized to introduce subject matter. They are also accessible to the students to be used on an individual basis.

IV. EVALUATION

The students are evaluated by the instructors as to their progress in language and in the course content area through the pre-test, work sheets, check list and a post test. Individual student profiles and folders are kept on record to check on student progress at all times. Oral development skills are assessed individually.

Students go through the following process in utilizing the modules:

Pre-test (Students scoring 85% or below must complete the entire module. Those scoring above 85% may go on to the next module).

Reading of instruction sheet
Information sheet
Series of written and oral exercises
Oral evaluation
Post test (oral and written)
Recycling, if needed (Students scoring 85% or below on post-test are recycled through module in designated weak areas. See coding system.)

V. MODULE OUTLINE

2.0 Sterilization and Sanitation

2.1 Natural defenses against bacteria

2.2 Medical defenses against bacteria

2.3 Physical agents of Sterilization and Sanitation

2.4 Chemical agents of Sterilization and Sanitation

STUDENT OBJECTIVES

After completing this module the student will be able to:

2.1 List all the natural defenses of the human body against pathogenic bacteria.

2.1.1 Define Sepsis and Asepsis and apply definition to trade area.

2.2 Name the three main types of vaccines and how they are made.

2.3 Define sterilization and sanitation.

2.3.1 List the three types of physical sterilizers and describe how they are used in a barber and beauty shop.

2.4 List three types of chemical sterilizers and give examples of how they are used in a barber or beauty shop.

PRETEST FOR STERILIZATION AND SANITATION

1. What is meant by sterilization and sanitation?

2. List the natural defenses of the human body against bacteria.

3. Name the three types of vaccines and describe how each is made.

4. Name the two methods of sterilization.

5. Define asepsis.

6. Define sepsis.

7. What is a disinfectant?

8. What are ultraviolet rays used for in a hair styling salon?

9. What are the three requirements for a good disinfectant?

10. What does the word sterilize mean?

11. Why is it necessary to keep your shop sanitary?

12. What are toxins?

13. Is broken skin a defense against bacteria? Explain your answer.

14. What are white corpuscles?

15. What is a mucous membrane?

16. What do stomach acids and saliva have in common?

Instructions: 2.1

This information sheet explains how the human body fights against the different types of pathogenic bacteria. It is important to understand how your body defends itself against disease-causing germs. The vocabulary list will help you identify important words in the information sheet.

Instrucciones:

Esta página de información explica cómo el cuerpo humano pelea contra las diferentes clases de bacteria patogénica. Es importante comprender cómo tu cuerpo se defiende contra gérmenes que causan enfermedades. La lista del vocabulario te ayudará a identificar palabras importantes que aparecen en la página de información.

Vocabulary	Vocabulario
sepsis	sepsis
virus	virus
asepsis	asepsis
mucous	membranas mucosas
mucus	mocos de la nariz
corpuscles	corpúsculos

Keep the following information in mind as you read the information sheet.
Recuerda esta información al leer la página de información.

1. The human body has natural defenses against disease causing germs.
   El cuerpo humano se defiende naturalmente de gérmenes que causan enfermedad.

2. Sepsis occurs when the poison made by pathogenic bacteria enter the blood stream.
   Sepsis ocurre cuando el veneno de bacteria patogénica entra en la sangre.

3. Asepsis refers to the absence of poison which is made by pathogenic bacteria.
   Asepsis se refiere a la ausencia de veneno hecho por bacteria patogénica.

4. The natural defenses against pathogenic bacteria are:
   Las defensas naturales del cuerpo contra bacteria patogénica son:

(1) The skin	el cutis
(2) The mucous membrane	membranas mucosas
(3) Mucus	mocos de la nariz
(4) Stomach acid	acidos del estómago
(5) Saliva	saliva
(6) White corpuscles	corpúsculos blancos

1. From what you have read you know that germs which enter our body can be destroyed with different types of medicine depending on the disease or virus. A virus is another form of bacteria. An example of a virus is the common cold or the swine flu. When pathogenic bacteria enter the body the blood system is poisoned with the toxins that are found in the harmful bacteria. When a person contacts a virus or other pathogenic bacteria this "poisoning" is called sepsis. When a person or object is free of harmful bacteria it is called asepsis.

2. The body also fights diseases naturally. Your body has many defenses against germs. It actually "declares war" against disease germs. The skin is the body's "first line of defense." If the skin is "broken" by a cut it is open to attack. The skin protects your body.

3. There are other ways disease can enter the body. Some diseases enter the body through the nose and mouth. These areas provide warmth and moisture where germs live. The thin tissues in the nose called mucous act like a wall of protection. They also produce a sticky substance called mucus that help the tiny hairs in your nose catch germs before entering your body.

4. The saliva in your mouth and acids in your stomach are other fluids that fight germs constantly.

5. Possibly the most important defense against germs are the white corpuscles found in your blood. These corpuscles "swallow" germs or poison them with powerful chemicals. Your blood is made up of red and white corpuscles. Corpuscles are minute living cells.

La Guerra Contra Bacteria

1. Ya sabes que los gérmenes que entran a tu cuerpo se pueden destruír con diferentes tipos de medicina pendiente a la enfermedad o virus. Un virus es otro tipo de bacteria. Un exemplo de un virus es un resfriado o la influenza marranos. Cuando bacteria patógena entra al cuerpo, el sistema de sangre se envenena con los venenos que tiene la bacteria dañina. Cuando una persona contacta un virus o bacteria patógena, este envenenamiento se llama sepsis. Cuando una persona o un objeto está libre de bacteria dañina se llama asepsia.

2. El cuerpo lucha contra enfermedades naturalmente. Tu cuerpo tiene mucha resistencia contra gérmenes. Tu cuerpo "declara guerra" contra gérmenes. El cutis es la primer defensa de tu cuerpo. Si te haces una herida, inmediatamente está dispuesto a ser atacado. El cutis protege a tu cuerpo.

3. Hay otros modos por los cuales enfermedades pueden entrar al cuerpo. Algunas enfermedades entran por la nariz o la boca. Estas áreas proveen humedad y calor donde pueden vivir los gérmenes. Los tejidos en la nariz llamados membranas mucosas sirven como pared de protección. Estas producen una sustancia pegajosa llamada mocos que ayuden a los pelos pequeños en la nariz a coger los gérmenes antes que entren a tu cuerpo.

4. La saliva en tu boca y los ácidos en tu estómago son otras sustancias que conbaten gérmenes constantemente.

5. Posiblemente la defensa más importante contra gérmenes son los corpúsculos blancos que se encuentran en tu sangre. Estos corpúsculos se "comen" a los gérmenes o los envenenan con químicos poderosos. Tu sangre está compuesta de corpúsculos rojos y blancos. Corpúsculos son células vivientes muy pequeñas.

Find The Answers 2.1

1. One example of a virus is

   A. Bone spurr C. Cancer

   B. Ringworm D. Swine flu

2. The word in paragraph 1 which means pathogenic "poisoning" is _____

3. The words "first line of defense" in paragraph 2 refer to the word_____

   _____ _____.

4. The story does not say so, but it makes you think that

   A. Sepsis is the main cause of disease
   B. Asepsis is the main cause of disease.
   C. Broken skin is the main cause of disease

5. The thin tissues in the nose which act like a wall of protection are called mucus.

   Yes No Does not say

6. On the whole, this story is about

   A. Pathogenic poisoning or sepsis
   B. Natural defenses against bacteria
   C. Chemical defenses against bacteria

7. What is possibly the most important defense against germs? (check the story again)

   A. The skin
   B. Mucous
   C. White corpuscles

Read each sentence below and indicate whether it is true "T" or false "F"

_____1. The most important defense against germs are the red blood corpuscles.

_____2. Broken skin is an ideal place for germs to grow and multiply.

_____3. A virus is a form of bacteria

_____4. A sticky substance produced in the nose is called mucous.

_____5. The term "asepsis" refers to a stage of contamination.

_____6. When bacteria forms in your mouth or enters there, it is all automatically destroyed by the saliva.

_____7. Acids formed by your body are excellent means of fighting bacteria.

_____8. Bacteria produce toxins.

Match the following words with the correct definition.

_____skin	1. Minute living cells
_____sepsis	2. A thin tissue in the nose.
_____saliva	3. A digestive fluid found in the mouth
_____asepsis	4. Contaminated with a virus
_____virus	5. Free of harmful bacteria
_____mucous	6. A sticky substance produced in the nose
_____corpuscles	7. Poisons
_____mucus	8. A form of bacteria
_____toxins	9. The outer protection of the body against disease
_____flu	10. A virus

Answer the following questions: 2.1

1. Give at least five examples of viruses.

2. Explain what is meant by "the body declares war" in the reading selection.

3. Give at least three examples as to how disease can enter the body.

4. What would you consider favorable conditions for germs to grow successfully?

5. How can the mucus in your nose be helpful?

6. Name at least five ways that your body fights germs or disease.

7. What are corpuscles and how do they help you?

Instructions:

In this passage you will read about vaccines. The information it contains will help you understand the importance of vaccines in relation to your health and your trade. You are provided with a list of words that are important in this article. Check each word carefully before you read the article.

Instrucciones:

En esta seleccion vas a leer de vacunas. La información que contiene este articulo te ayudará comprender la importancia de vacunas en relación a tu salud y tu empleo. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulary	Vocabulario
vaccine	vacuna
tuberculosis	tuberculosis
whooping cough	tos ferina
toxins	venenoso
inactivating	inactivando
diphtheria	difteria
tetanus	tétanos

Keep the following questions in mind as you read the article.
Recuerda las siguientes preguntas al leer la seleccion.

1. What are two ways in which you can combat disease?
   Nombra dos modos como puedes combatir enfermedades.

2. How is a vaccine made from live bacteria?
   ¿Cómo se hace la vacuna de bacteria viva?

3. How is killed bacteria utilized to help you?
   ¿Cómo se utiliza la bacteria no-viva para ayudarte?

4. How can vaccines be made from toxins produced by bacteria?
   ¿Cómo se pueden hacer vacunas de venenos producidos por bacteria?

5. Name the three main types of vaccines.
   Nombra los tres tipos mayores de vacunas.

1. There are times when your body cannot fight a disease naturally. Your white corpuscles may be unable to overcome a virus or infection. There are some diseases that are known to be too strong for our bodies to overcome.

2. Scientists have learned through the study of bacteriology that one way of preventing diseases is through the use of vaccines.

3. There are three main types of vaccines. (1) One type is made from live bacteria, and (2) another from killed bacteria. (3) The third type is made from inactive toxins (poisons) produced by bacteria.

   (1) The first type of vaccine is made by growing pathogenic bacteria. The bacteria become harmless after they grow in stages while in a laboratory. At one stage this once pathogenic bacteria becomes non-pathogenic which is then injected into animals. The animals then become immune to the disease caused by that type of bacteria. In the United States most vaccines that are used to prevent tuberculosis contain living but harmless bacteria.

   (2) Killed bacteria of certain types can also be used for vaccines. Most Americans are vaccinated against whooping cough with bacteria that have been killed with heat or chemicals.

   (3) Certain bacteria cause serious diseases because they produce powerful toxins (poisons). Vaccines to prevent some of these diseases can be prepared by growing the bacteria in a laboratory, by separating the toxins they produce, and inactivating the toxins with heat or chemicals. Most Americans are vaccinated against diphtheria and tetanus with vaccines made of inactivated toxins.

Vacunas

1. Hay veces que tu cuerpo no puede combatir enfermedades naturalmente. Los corpúsculos blancos no pueden vencer a una virus o infección.

2. Científicos han aprendido por sus estudios de bacteriología que un modo de prevenir enfermedades es por el uso de vacunas.

3. Hay tres tipos mayores de vacunas. (1) Un tipo se hace de bacteria viva, y (2) otro de bacteria matada. (3) El tercer se hace de toxinos (venenos) producidos por bacteria.

   (1) El primer tipo de vacuna se produce creciendo bacteria patógena. La bacteria se hace no-dañina al crecer por etapas en el laboratorio. En un etapa la bacteria patógena se convierte a bacteria no-patogena la cual se inyecta a los animales. Entonces los animales se hacen inmunos a la enfermedad causada por este tipo de bacteria. En los Estados Unidos casi todas las vacunas que se utilizan para prevenir tuberculosis contienen bacteria viviente pero no-dañina.

   (2) Bacteria matada de ciertos tipos también se puede utilizar para vacunas. Casi todos en los Estados Unidos se vacunan contra tos ferina con bacteria que se ha matado con aplicación de calor o químicos.

   (3) Algunas clases de bacteria causan enfermedades muy serias porque estas producen venenos muy poderosos. Vacunas para prevenir algunas de estas enfermedades se pueden preparar en el laboratorio, creciendo la bacteria y dividiendo los venenos que se producen, inactivando los venenos con la aplicación de calor o químicos. En esta nación casi todos se vacunan contra difteria y tétanus con vacunas hechas de venenos inactivados.

Find The Answers

1. There are _____ main types of vaccines?

   A. many
   B. three
   C. four
   D. few

2. The word in paragraph 1 that means to "conquer or triumph" is _____

3. The words "injected into animals" in paragraph 3 refer to the words _____

   _____.

4. The story does not say so, but it makes you think that

   A. most vaccines are worthless
   B. vaccines are important to our health
   C. natural defenses are all that is needed

5. Killed bacteria of certain types can also be used for vaccines.

   Yes No Does not say

6. On the whole, this story is about

   A. diseases caused by toxins
   B. vaccine as a defense against disease
   C. laboratory experiments

7. What should you do if your white corpuscles are unable to overcome a virus? (check story again)

   A. get vaccinated
   B. get some rest
   C. take an aspirin

Fill in the blanks with the word you think belongs without looking back at the original article.

Scientists have learned through _____ study of bacteriology that _____ way of preventing disease _____through the use of _____ _____.

There are three types _____vaccines. One type is made _____ live bacteria, and _____from killed bacteria. The _____type is made from _____ toxins (poisons) produced by _____.

Match:

_____whooping cough

_____inactivating

_____tetanus

_____vaccine

_____tuberculosis

1. A vaccination for it is made from killed bacteria.
2. A vaccination for it is made from live bacteria.
3. A preventive for certain diseases.
4. Making inactive
5. You can get a vaccine for it is made from toxins produced by bacteria.

Complete the following exercise: 2.2

1. Explain how live bacteria can be used to combat tuberculosis.

2. What is the process of preparing vaccinations for diphtheria and tetanus?

3. What is killed bacteria and how can it be utilized for our benefit?

4. How can toxins or poisons found in bacteria be used to our advantage?

5. Name at least three ways of combating disease.

Instructions: 2.3

In this information sheet you will read about sterilization and sanitation. This sheet will help you to remember the different ways of keeping a beauty salon and barbershop germ-free. The vocabulary list provided will help you remember important words that deal with sterilization and sanitation.

Instrucciones:

En esta página de información vas a leer acerca de esterilización y sanitación. Esta página te ayudará a recordar las diferentes maneras de tener un salón de belleza y peluqueria limpio. La lista de vocabulario presenta palabras que se presentan en esta lectura.

Vocabulary	Vocabulario
sterilize	esterilizar
sanitary	sanitario
physical sterilization	esterilizar físicamente
bacteriology	bacteriología
steam pressure sterilizer	vapores
ultraviolet rays	rayos ultravioletos

Keep the following questions in mind while reading this information sheet.
Recuerda las siguientes preguntas al leer la página de información.

1. What is one of the two basic ways of sterilizing objects?
   ¿Cuál es uno de dos métodos de esterilizar objetos?

2. What are the three physical agents for sterilizing objects?
   ¿Cuáles son los tres agentes físicos de esterilizar objetos?

3. What does the word sterilize mean?
   Que significa la palabra esterilizar?

4. What is meant by sanitary?
   ¿Qué queremos decir con sanitario?

1. You have learned that your body fights disease naturally and also that medicine helps it to combat disease. In order to be safe from disease-causing germs, it is necessary to kill as many germs around us as possible.

2. It is mandatory that all public places provide means of preventing and killing germs that may exist. Germ-killing helps to prevent infections and the spread of diseases.

3. Professionals like barbers, beauticians, dentists, and doctors all take special care of their tools in order to prevent the spreading of disease-causing germs. These tools that are free of germs are said to be sterilized. Sterilization in bacteriology means the killing of disease-producing germs.

4. There are many ways of sterilizing tools and objects in public places. In barber and beauty shops there are some ways that have proven to be more effective than others. To sterilize means to destroy germs that are disease-causing. When you sterilize an object you are making this object germ-free or sanitary.

5. There are two basic ways of sterilizing or sanitizing objects. The first is a physical process. A good example of physical sanitizing is boiling an object in water.

6. Boiling water is no longer a popular method of sterilization in beauty salons and barber shops. Other physical agents that are used in sterilization and sanitation are steaming, dry heat and ultraviolet rays.

7. Steaming is used in a steam pressure sterilizer. Dry heat is used in barber and beauty shops to sterilize towels and similar material. Ultraviolet rays are used in the shops in an electric sanitizer to keep sterilized implements sanitary. (It is used as a storage for sterilized implements.)

In the next reading you will read about the second basic way of sterilization.

Esterilización y Sanidad

1. Ya has aprendido que tu cuerpo combate enfermedades naturalemente y también que medicina ayuda a combatir enfermedades. Para estar protegidos de gérmenes que causan enfermedades, es necesario matar tantos gérmenes dañinos como sea posible.

2. Es mandatorio que todo lugar público provee modos de prevenir y destruír gérmenes. Esto ayuda a prevenir infecciones y la propagación de enfermedades.

3. Profesionales como peluqueros, cosmetólogos, dentistas y doctores todos protegen su herramienta para prevenir la propagación de gérmenes que causan enfermedades. A la herramienta que está libre de gérmenes se refiere cómo esterilizada. Esterilización en bacteriología significa que los gérmenes que causan enfermedades han sido matados.

4. Hay muchos modos por los cuales se pueden esterilizar los instrumentos en un lugar público. En la peluquería y en el salón de belleza hay modos de esterilizar que son más eficientes que otros. Esterilizar quiere decir que los gérmenes que causan enfermedades son destruídos. Cuando esterilizas un objeto, estás haciéndolo sanitario o libre de gérmenes.

5. Hay dos modos básicos de esterilizar o desinfectar. El primero es un proceso físico. Un buen exemplo de desinfectar físicamente es hirbiendo un objeto en agua.

6. Utilizando agua herbida ya no es un modo muy popular para esterilizar en los salones de belleza o en peluquerías. Otros agentes físicos que se utilizan en esterilizar y desinfectar son el uso de vapores químicos, calor seca y rayos ultravioleta.

7. Se vaporiza en un desinfectador de vapor con presión. Calor seco se utiliza en peluquerías y salones de belleza para esterilizar toallas y cosas semejantes. Rayos ultravioleta se utilizan en un desinfectador eléctrico para mantener los instrumentos sanitarios. (Se utiliza para guardar instrumentos desinfectados.)

En la siguiente lectura vas a leer de el segundo modo básico de desinfectar.

Find The Answer 2.3

1. How many basic ways are there for sterilizing or sanitizing tools?

   A. one
   B. two
   C. three
   D. four

2. The word in paragraph 3 that means "germ free" is _____.

3. The words "to destroy germs" in paragraph 4 refer to the word_____

   _____.

4. The story does not say so, but it makes you think that

   A. fighting disease can only be done naturally
   B. fighting disease can only be done with vaccines
   C. fighting disease can be done in many ways

5. Dry heat is a type of physical agent.

   Yes No Does not say

6. On the whole this story is about

   A, beauty shops and their tools
   B. spreading disease
   C. a third way of fighting disease

Look at the list of words below. If the word is spelled correctly circle the R. If the word is mispelled, circle the W and spell the word correctly.

R	W	desease	_____
R	W	killing	_____
R	W	infections	_____
R	W	baurbers	_____
R	W	beauticians	_____
R	W	starilize	_____
R	W	sanitation	_____
R	W	phisical	_____
R	W	implements	_____
R	W	steralization	_____

Look at the list below. There are three spellings for each word. Look at the words carefully and circle the word that is spelled correctly.

1.	elektric	electric	electrick
2.	steam	stem	steame
3.	starelizer	sterilizer	sterelizer
4.	implements	emplements	implemence
5.	phisical	phisecal	physical
6.	sanitary	sanitery	sanatary
7.	ultravilet	ultraviolet	ultraviolete
8.	disease	desease	disese
9.	bacteriolegy	backteriology	bacteriology
10.	profeshenal	professional	profeshional

Select the correct term from the following list and place it next to the statement in parenthesis. The words may be used more than once.

medicine	sterilized	steaming
germ-killing	sanitary	dry heat
sterilize	sterilization	
physical sanitizing	ultraviolet rays	

1. Helps combat disease (_____)

2. Helps prevent infections and the spread of diseases (_____)

3. Tools that are free of germs (_____)

4. To destroy germs that are disease-causing (_____)

5. The killing of disease-producing germs (_____)

6. Sterilize and make germ free (_____)

7. Boil an object in water (_____)

8. Used in a steam pressure sterilizer(_____)

9. Used in an electric sanitizer (_____)

10. Physical agents used in sterilization and sanitation. (_____)

(_____) (_____)

Instructions:

In this passage you will read about chemical agents for sterilization. This information will be useful in your trade area. You are provided with a list of words that are important in this article. Check each word carefully before you read the article.

Instrucciones:

En esta selección vas a leer de agentes químicos que se utilizan para esterilizar. Esta información es importante en tu area vocacional. Tienes una lista de palabras importantes que aparecen en este artículo. Lee cada palabra cuidadosamente.

Vocabulary	Vocabulario
chemical	químico
agents	agentes
sterilization	esterilización
disinfectants	desinfectante
quats	"quats"
formalin	formalina
alcohol	alcohol
lysol	lysol
implements	herramienta
sanitizers	esterilizadores
solution	solución
corrosive	corrosivo
antiseptics	antisépticos
boric acid	ácido bórico
tincture	solución
iodine	yodo
fumigate	ahumar
vapors	vapores
formaldehyde	formaldehida
sanitary	sanitario

Keep the following questions in mind as you read this article.
Recuerda las siguientes preguntas al leer este artículo.

1. What are the characteristics of a good disinfectant?
   ¿Cuáles son las características de un buen desinfectante?

2. What are the three types of chemical agents used in sterilization?
   ¿Cuáles son los tres tipos de agentes químicos que se utilizan para esterilizar?

3. How is lysol used as a disinfectant?
   ¿Cómo se utiliza yodo para sanitizar?

4. What is the process for sterilizing instruments?
   ¿Cuál es el proceso de esterilizar herramienta?

5. What are antiseptics and what are they used for?
   ¿Qué son antisépticos y para qué se utilizan?

6. What are some antiseptics which are used in hair styling shops?
   ¿Cuáles son algunos antisépticos que se utilizan en un salón de belleza o peluquería?

7. How are fumigants prepared?
   ¿Cómo se prepara un fumigante?

1. The second method of sterilizing implements in the beauty salons and barber shops is a chemical method. There are three types of chemical agents used in sterilization. One group are the disinfectants. Disinfectants are (a) "quats" (b) formalin, (c) alcohol and (d) lysol. All are used to clean implements except lysol. Lysol is used to clean floors, sinks, and toilets. Disinfectants are used in wet sanitizers. A wet sanitizer is a jar with a solution and a lid. You place your tools in the sanitizer in order to disinfect them. After a tool has been disinfected it must be wiped dry and placed in a dry cabinet sanitizer. This cabinet acts as a storage place for disinfected implements. There are four requirements of a good disinfectant. It must be convenient to prepare, quick acting, non-corrosive, and non-irritating to the skin.

2. A second group of chemical agents are the antiseptics. They are used more for care of the skin or eyes. Antiseptics can kill or retard the growth of bacteria. These are some of the antiseptics used in beauty salons and barber shops: (a) boric acid used for cleaning out the eyes (b) tincture of iodine used for cleaning cuts and wounds (c) formalin used to clean hands, cabinets and bowls. Formalin comes in a liquid or a gas.

3. The third and last of the chemical agents are the fumigants or vapors. A fumigant is prepared by placing a tablespoonful of borax and one tablespoonful of formalin in a small tray and placed in a dry cabinet. This combination will chemically form formaldehyde vapors. This chemical vapor is used to keep disinfected objects sanitary.

Agentes Químicos para Esterilización

1. El segundo método de esterilizar instrumentos en el salón de belleza o en la peluquería es un método químico. Hay tres tipos de agentes químicos que se utilizan en esterilizar. Un grupo son los desinfectantes. Desinfectantes son (a) "cuats" (b) formalina, (c) alcohol y (d) "lysol." Todos se utilizan para limpiar instrumentos con la excepción de "lysol." Lysol se usa para lavar suelos o lavoratorios. Desinfectantes se utilizan en desinfectantes por inmersión. Un desinfectante por inmersión es un receptáculo con tapa que contiene una solución desinfectante. Se sumerjan los instrumentos en el desinfectante para esterilizarlos. Después de esterilizar un instrumento se debe secar con una toalla y colocar en un gabinete desinfectante. Este gabinete sirve como un lugar para desinfectar instrumentos. Hay cuatro requisitos para que un desinfectante sea bueno. Debe de ser fácil de preparar, actúa rápidamente y no corrosivo o que nó irrite la piel.

2. El segundo grupo de agentes químicos son los antisépticos. Estos se utilizan más para el cutis y los ojos. Antisépticos pueden matar o retardar el crecimiento de bacteria. Estos son algunos de los antisépticos que se usan en salones de belleza y peluquerías: (a) ácido bórico para la limpieza de los ojos (b) yodo para limpiar heridas y (c) formalina para limpiar las manos, los gabinetes y lavoratorios. Formalina viene en forma líquida o gas.

3. El tercer y último de los agentes químicos son los fumigantes o vapores. Un fumigante se prepara echando una cucharada de bórax y una cucharada de formalina en una bandeja y colocado en un gabinete desinfectante. Esta combinación forma vapores formaldehida. Este vapor químico se utiliza para mantener objectos sanitarios y desinfectados.

20a

Find The Answers

1. Disinfectants are used to clean implements except

   A. alcohol
   B. formalin
   C. lysol
   D. "quats"

2. The word in paragraph 1 that means something that is suitable and near at hand is _____.

3. The words "They are used more for care of skin or eyes" in paragraph 2 refer to the word _____.

4. The story does not say so, but it makes you think that

   A. antiseptics are for hands only
   B. sterilization is important to keep places free from germs
   C. sterilization is not needed in beauty shops

5. Formalin comes in liquid form only.

   Yes No Does not say

6. On the whole, the article tells about

   A. chemical methods used for sterilization
   B. disinfected implements
   C. preparation of fumigants

7. Which of the following is used for cleaning out the eyes

   A. boric acid
   B. tincture of iodine
   C. formalin

Choose the Correct Answer 2.4

1. Sterilization is the process of:

A. Keeping bacteria alive
B. Destroying offensive odors
B. Destroying only beneficial micro-organisms
C. Destroying both harmful and beneficial bacteria

2. The active gas in formalin is:

A. Chlorine
B. Oxygen
C. Sulfur
D. Formaldehyde

3. Quaternery ammonium compound ("Quats") is commonly used as:

A. A disinfectant
B. A styptic
C. A fumigant
D. A deodorant

4. A covered receptacle containing a disinfectant solution is called a:

A. Dry sanitizer
B. Cabinet sanitizer
C. Wet sanitizer
D. Oven sanitizer

5. Before sanitizing any implement, it should be:

A. Wiped with a towel
B. Wiped with a tissue
C. Rinsed with cold water
D. Cleansed with soap and warm water

6. An example of a chemical method of sanitization is:

A. Boiling water
B. Steam under pressure
C. Ultra-violet rays
D. Quats

7. Sanitized implements are best stored:

A. In an open box
B. In an open cabinet
C. In a dry cabinet sanitizer
D. On a shelf

8. Barbers should clean their hands:

A. In the morning
B. Whenever their hands get dirty
C. Morning and afternoon
D. Before and after serving a patron

9. A chemical agent which may kill or prevent the growth of bacteria is called a:

A. Sepsis
B. Styptic
C. Fungus
D. Antiseptic

Match the following words with the correct definition: 2.4

_____quaternary (quats)

_____fumigants

_____lysol

_____disinfectants

_____formalin

_____wet sanitizer

_____dry cabinet sanitizer

_____chemical agents

_____boric acid

_____formaldehyde vapors

_____retard

_____tincture of iodine

1. Antiseptic used to clean out the eyes
2. Where a tool is placed after it has been disinfected and wiped dry
3. Used to clean floors, sinks, and toilets
4. "Quats" formalin, alcohol, and lysol
5. Prepared with borax and formalin
6. Type of disinfectant
7. Chemically formed vapors
8. A jar with a solution and a lid
9. Used for cleaning cuts and wounds
10. Antiseptic which comes in a liquid or gas
11. To kill or stop growth
12. Antiseptics and disinfectants

Answer These Questions:

1. How is the fumigant prepared?

2. Which are the first group of chemical agents?

3. Which are the second group of chemical agents?

4. What are disinfectants used for?

5. What are antiseptics used for?

POST-TEST FOR STERILIZATION AND SANITATION

1. What is meant by sterilization and sanitation?

2. What does the word sterilize mean?

3. Define sepsis.

4. Define asepsis.

5. What are the three requirements for a good disinfectant?

6. What is a disinfectant?

7. Name the three types of vaccines and describe how each is made.

8. List the natural defenses of the human body against bacteria.

9. What are ultraviolet rays used for in a hair styling salon?

10. Name the two methods of sterilization.

Vocabulary	Vocabulario
acid	ácido
agent	agente
alcohol	alcohol
antiseptic	antiséptico
asepsis	asepsia
boric acid	ácido bórico
attack	atacar
cabinet	gabinete
combat	combatir
contact	contacto
convenient	conveniente
corpuscle	corpúsculo
corrosive	corrosivo
declare	declarar
defense	defensa
destroy	destruir
disinfectant	desinfectante
fluid	fluido
formaldehyde	formaldehida
formalin	formalina
fumigant	fumigante
implements	herramienta
inactive	inactivo
infect	infectar
inject	inyectar
iodine	yodo
irritate	irritar

Vocabulary	Vocabulario
laboratory	laboratorio
lysol	lisol
mandatory	mandatorio
moisture	humedad
mucous	mocoso
mucus	mocosidad
natural	natural
nose	nariz
physical	físico
popular	popular
pressure	presión
prevent	prevenir
produce	producir
professional	profecional
protection	protección
public	público
ray	raya
retard	retardar
saliva	saliva
sanitary	sanitario
sepsis	sepsia
skin	piel
solution	solución
steam	vapor
sterilize	esterilizar
sticky	pegajoso

Vocabulary	Vocabulario
stomach	estómago
swallow	tragar
toxin	veneno
type	tipo
ultraviolet	ultravioleta
vaccine	vacuna
vapor	vapor
virus	virus
warmth	calor
whooping cough	tos ferina